

MESOC Final event

9th March 2023 · Paris

**‘SICCRED. Societal Impact
of Culture and Creativity.**

**Regional European
Dashboard’**

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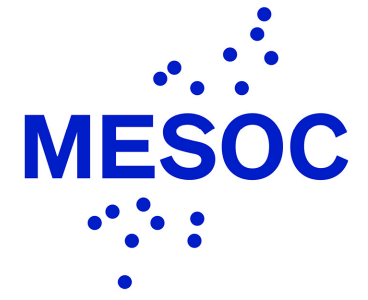
MESOC

measuring
the social dimension
of culture



This project has received funding
from the European Union's Horizon 2020
research and innovation programme
under grant agreement No 870935

BACKGROUND



- Growing interest in CCS as a potential vector for economic growth and societal well-being, both by academics and policy makers.
- Need to find transition variables and confounders that could explain and help to understand the path of impacts on social dimensions.
- New methods of artificial intelligence and machine learning make it possible to answer complex questions like never before.

Main objective:

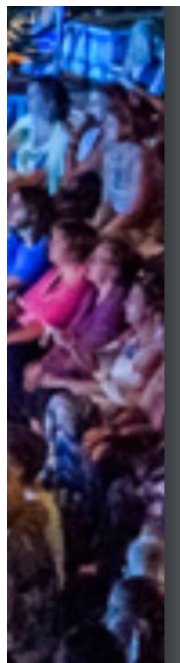
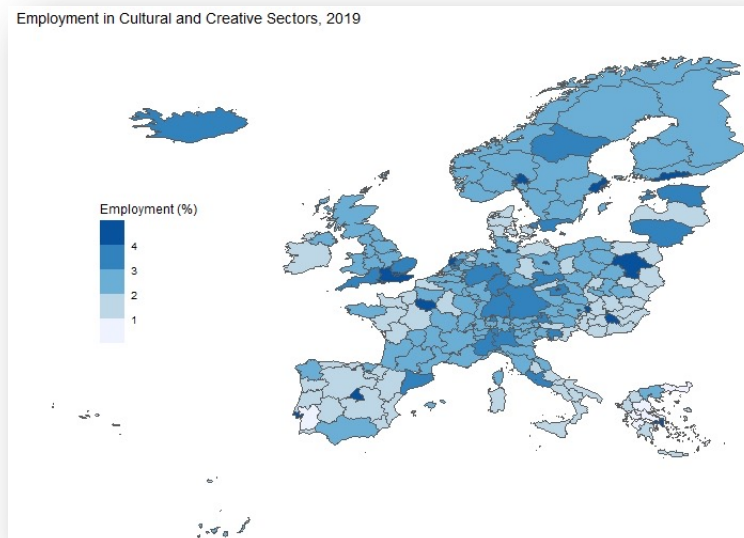
To identify, model and quantify the impacts of Cultural and Creative Sectors on well-being at a regional level



DATA (2008 – 2019)

Main sources

- Labour Force Survey
- Better Life Index



209 regions
(176 NUTS 2 & 33 NUTS 1) from 26 countries

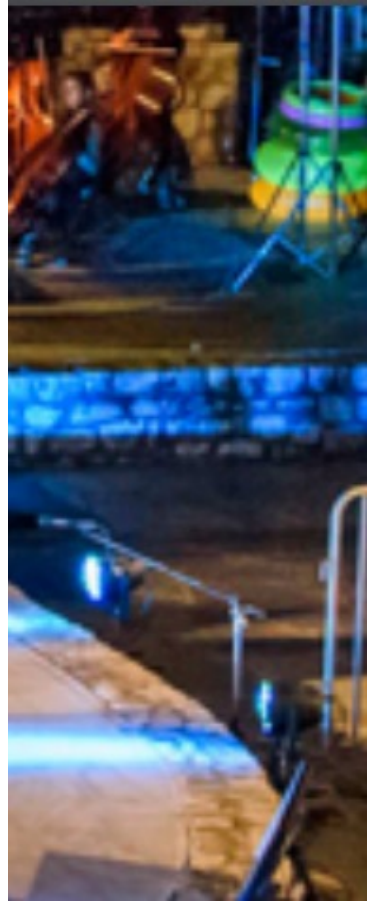
WELL-BEING INDICATORS



Dimension	Indicator
Access	Access to services
Civic	Civic engagement
Community	Community
Education	Education
Environment (-)	Environment (-)
Health	Health
Housing	Housing
Income	Income
Jobs	Jobs
Life	Life satisfaction
Safety	Safety (-)
	Access to services
	Households with broadband access (%)
	Voter turnout (%)
	Social network support (%)
	Educational attainment (%)
	Air pollution ($\mu\text{g}/\text{m}^3$ of particulate matter)
	Life expectancy
	Rooms per person
	Net disposable income per capita (PPS)
	Employment rate (%)
	Life satisfaction (0-10)
	Homicide rate (per 100,000)



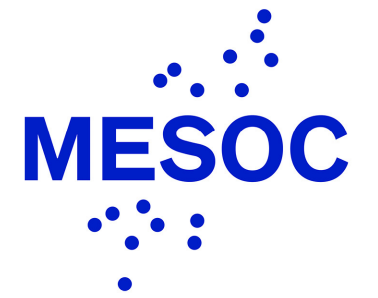
FINDINGS



	Average effect of CCS	Signif.	Model quality
Access to services	0.386 %		Low
Civic engagement	0.024 %		Very low
Community	0.208 %	.	Low
Education	3.860 %	***	High
Environment (-)	0.192	**	Medium
Health	0.081 yrs	***	High
Housing	0.014 room	*	Low
Income	348.1 €	***	High
Jobs	1.309 %	***	High
Life satisfaction	-0.038 points	***	High
Safety (-)	0.001 homicides		Very low



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<https://www.mesoc-project.eu/resources/SICCRED>

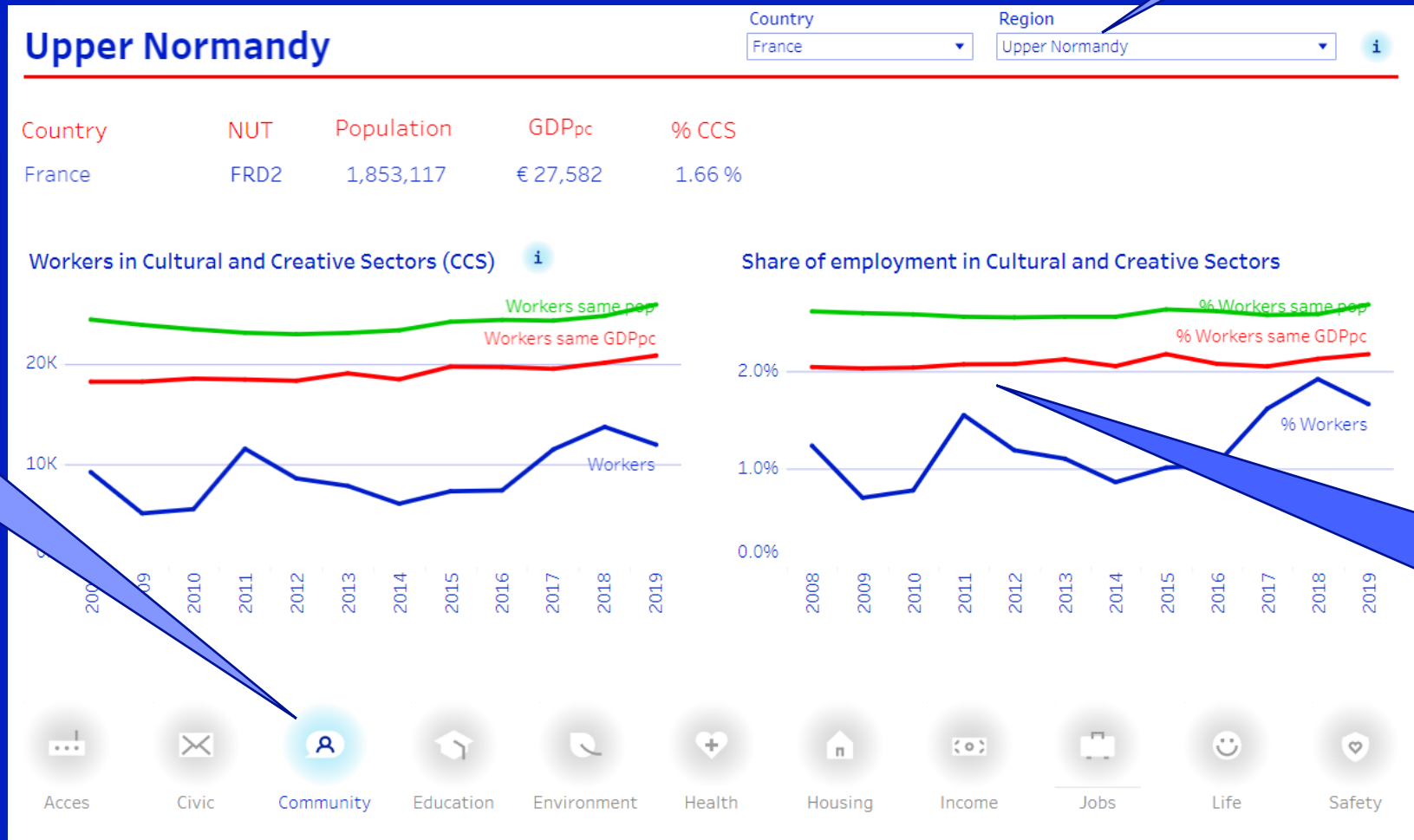


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SICCRED

Societal impacts of culture and creativity

You can choose the region



You can choose the well-being dimension

You get the data of the CCS workers

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You get a short explanation on the model and on the variables that are part of the model.

SENSE OF COMMUNITY

Social support network: percentage of people who believe they can rely on a friend in case of need

The dynamics of SCCs can affect the social support network by creating spaces for relationships between people through community cultural practices.

The model for community includes four dimensions of well-being as explanatory variables: civic engagement, education, income and jobs. Four other variables must be introduced as confounders. The first is median age. Older people tend to have reduced social connections and are much more likely to suffer from unwanted loneliness. Therefore, if the median age is higher, the percentage of people who have someone to rely on may decrease. The second is the foreign-born population, as they have fewer social networks in the countries of destination, especially in the early years (e.g. they may have the whole family far away). Also poverty and social exclusion for obvious reasons, as people excluded from society will find it very difficult to get social support. The latter is the percentage of the population living in urban or semi-urban areas. This can have a double effect. On the one hand, these areas concentrate people and it is more accessible to maintain personal contacts even if they live in other parts of the city or even in other cities through public transport and better connections. Despite this, rural areas have closer human contact, neighbours know each other, meet in the same places and form social networks that help to combat loneliness, whereas in cities sometimes not even neighbours in the same building know each other. The predominant effect is not clear, but in any case it is a relevant factor to take into account.

The variable that act as confounders and that fit the model are:

[Median age]: Median age of the population

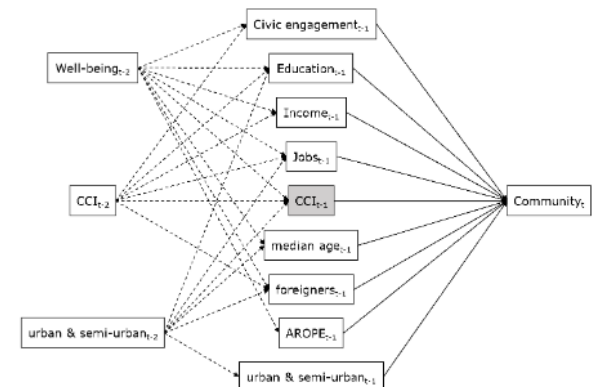
[Foreigners]: Percentage of foreign-born among the population aged 15-64.

[AROPE]: People at risk of poverty or social exclusion (AROPE rate, % of total population).

[Urban and semi-urban]: Share of population living in cities (DEGURBA 1) or in towns and suburbs (DEGURBA 2).

SPECIFICATION OF THE MODEL

$$\text{Community}_t = f(\text{CCI}_{t-1}, \text{Civic engagement}_{t-1}, \text{Education}_{t-1}, \text{Income}_{t-1}, \text{Jobs}_{t-1}, \text{median age}_{t-1}, \text{foreigners}_{t-1}, \text{urban \& semiurban}_{t-1}, \text{AROPE}_{t-1}) + \varepsilon_t(i,t)$$



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You get the value of the variable in this region compared with other regions with similar characteristics and with all the sample, as well as the reliability of the model.



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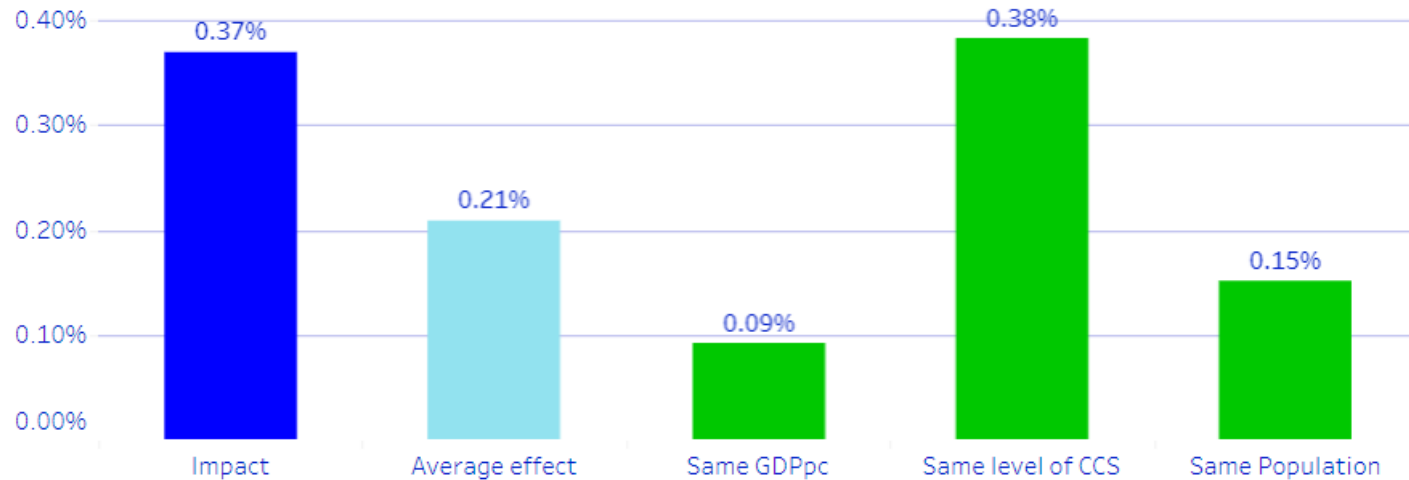
And then, we get the predicted impact of the CCS in the social dimension, compared with the average and samples of regions with similar features.

IMPACT

What will be the impact of a one percentage point increase in CCS employment on the sense of community indicator?

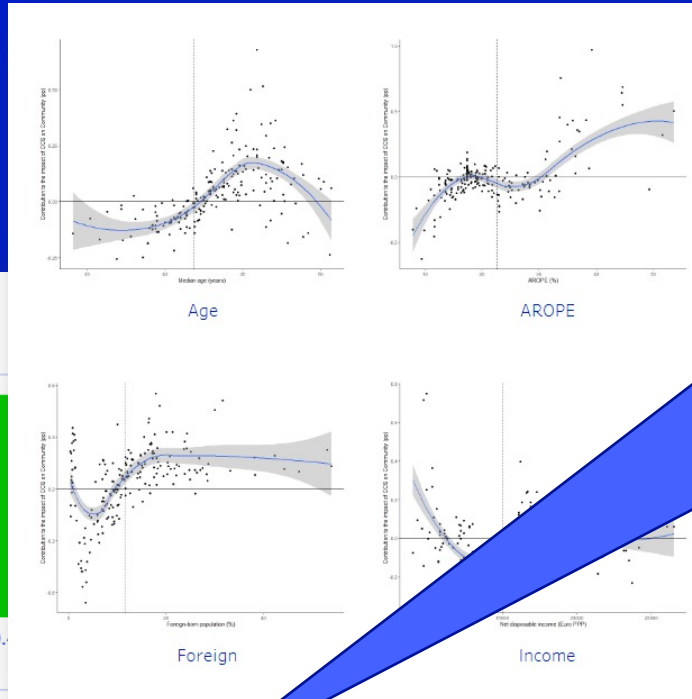
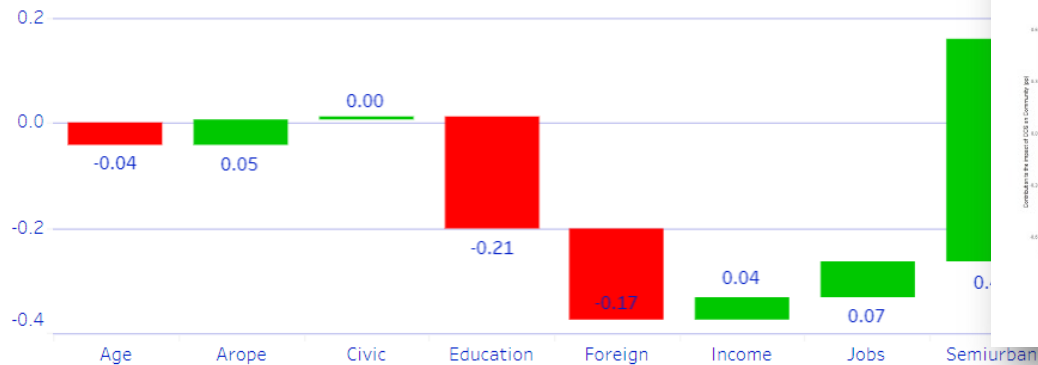
This means going from the current 1.66 % to 2.66 % of total workers.

The impact will be a increase of **0.37 %** of people who believe they can rely on friends in case of need, and that are with data of 2019 more or less **6,844** people more who believe they can rely on friends in case of need.



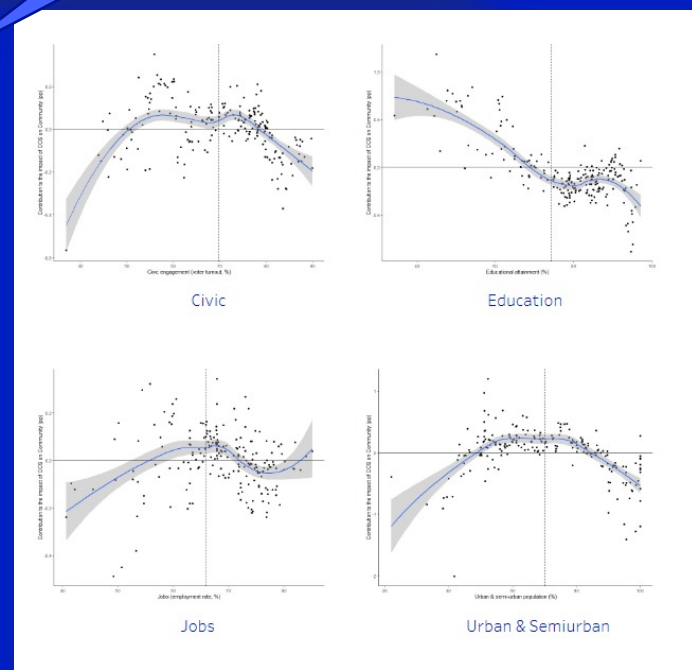
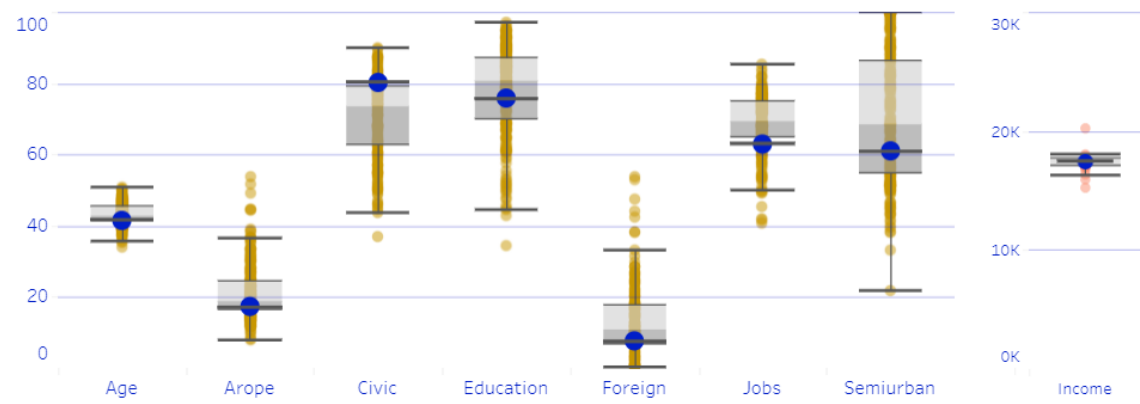
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Contribution of each variable to the results 2019 prediction, in Causal Forest, of the values of the variables in the previous year



This part shows and visually interprets the position of each of the variables that explain the model and the contribution they have made (positive or negative) to explaining the effect of the CCS in the impact over the social dimension.

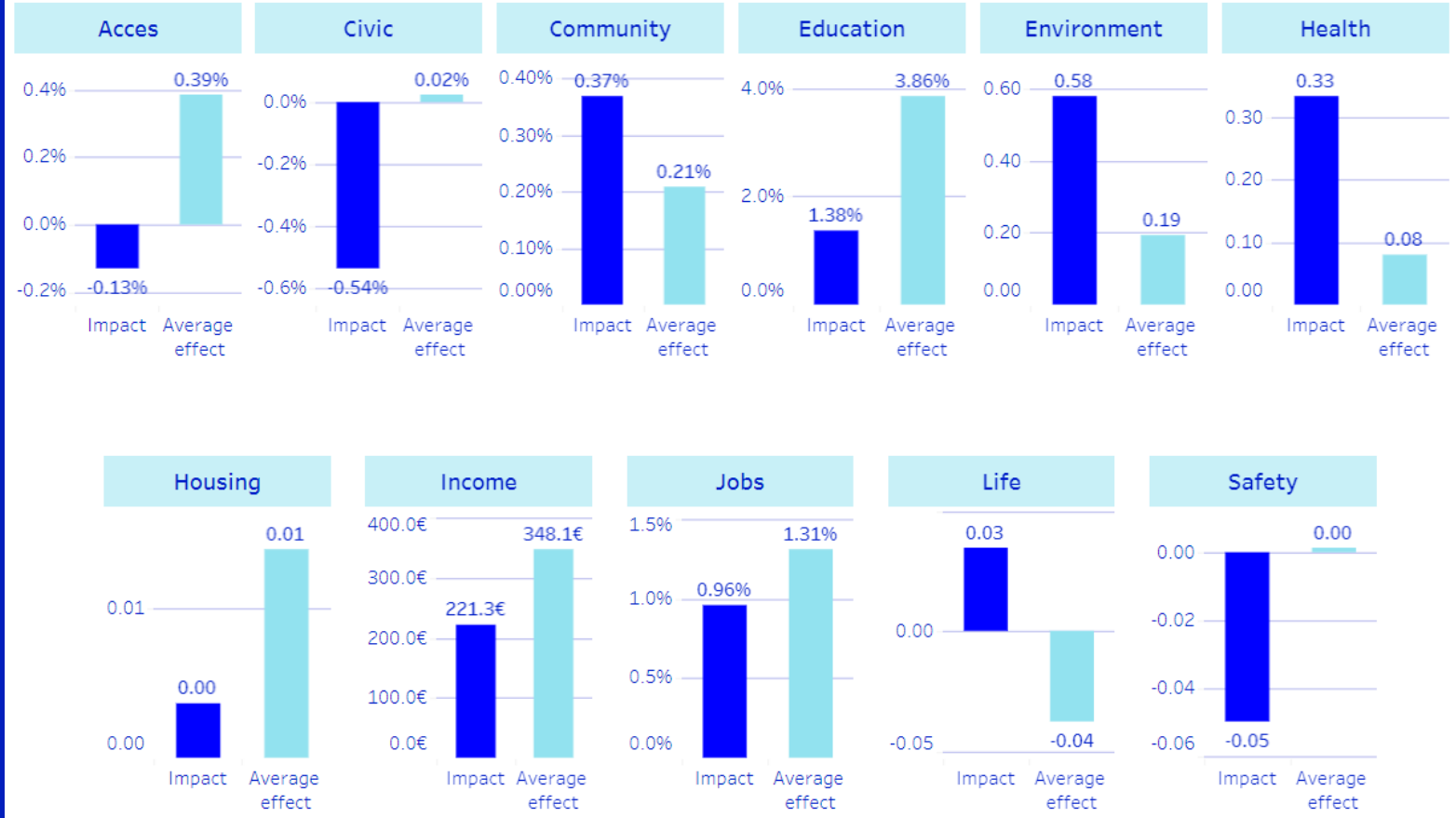
The following graphs locate each of the variables with respect to the distribution of the rest of the sample.



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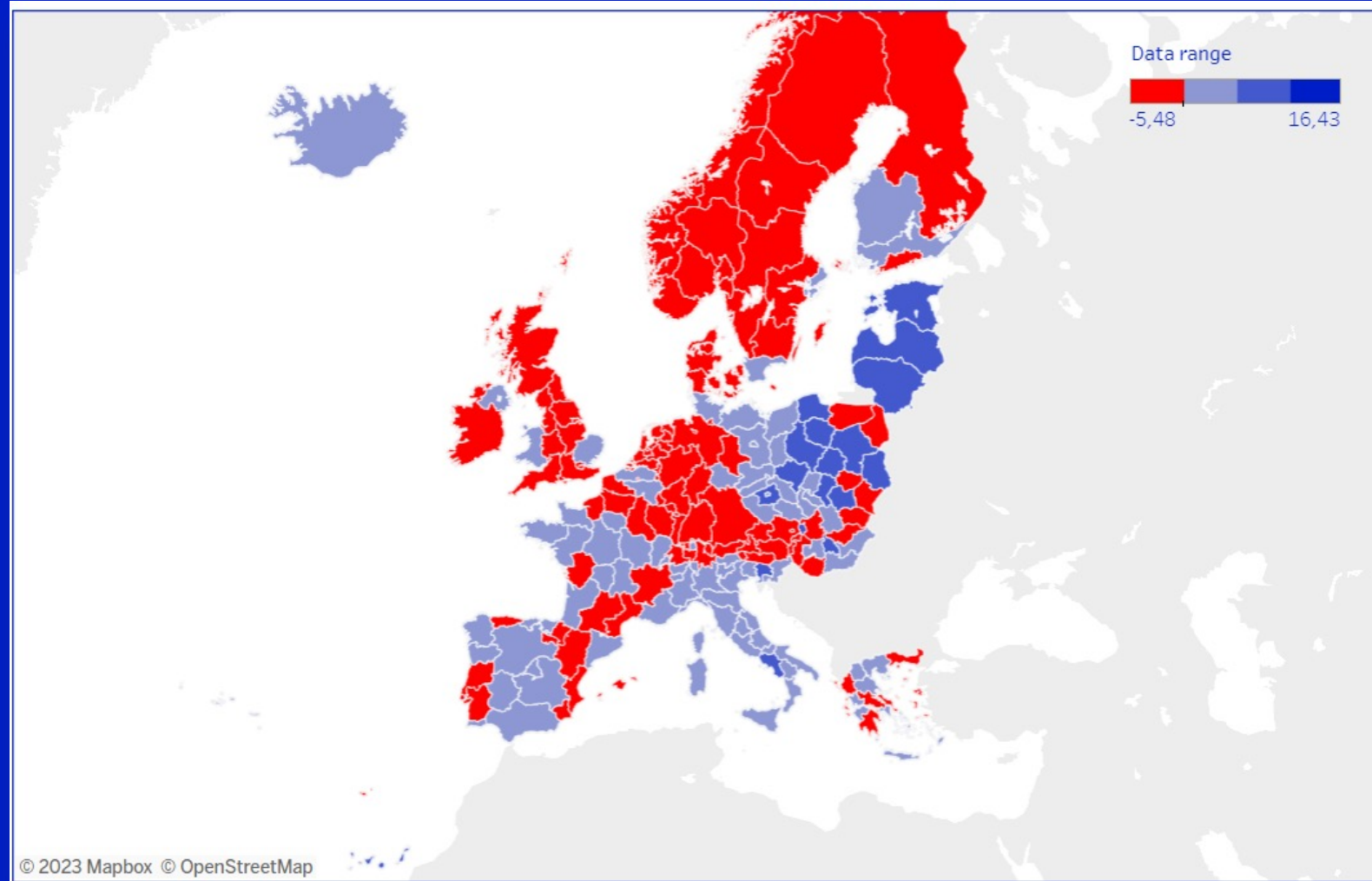
Then, the regional impact on each of the well-being dimensions can be compared with the average effect.

Estimated impacts on regional welfare indicators (OECD) in region Upper Normandy of a 1% increase in employment in the region's CCS compared to the average impact.



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Finally, a map allows you to compare the impact on the chosen indicator with that of the other regions.



POLICY IMPLICATIONS



- In aggregate, culture and creativity **improve regional well-being** throughout such aspects as education, health, income or jobs. Thus, expanding and strengthening the CCS should be a **strategic policy target**.
- Potentially **adverse effects should not be underestimated**. Strategies for their minimisation should be incorporated into the very design of cultural policies, as well as coordinated with other complementary policies.
- Given the **heterogeneity of regional effects**, their particularities should be taken into account in the design of cultural policies.





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